

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A personal recording and playback system (10) comprising:
 - a receiving means (19,21) for receiving streaming audio/visual input from at least one of broadcast radio, broadcast TV stations, cable TV systems, satellite TV systems, the Internet, and other wide-area networks;
 - a means (21) for connecting to wide area networks including the Internet and receiving streaming audio or audio/visual input;
 - a storage means (36) for storing the received streaming audio or audio/visual input;
 - a user input means (12) for inputting user commands to the recording/playback system (10);
 - a user output means (14) for outputting the audio or audio/visual input;
 - a recording means (32) for transparently:
 - tracking audio or audio/visual preferences of a user of the system (10);
 - maintaining a user profile database (34) for storing and maintaining user preferences;
 - receiving multiple audio or audio/visual streams via the receiving means (19,21) and storing the received multiple audio or audio/visual streams on the storage means (36) in the background; and,
 - maintaining an audio or audio/visual recording collection (48,50) according to the user preferences by analyzing the received audio/visual streams; and
 - a content analysis means (56) for examining and improving a quality of an audio or audio/visual stream stored in the recording collection and identifying at least one of: a profile of the stream, and voice over sections of the stream, degraded sections of the stream, and commercial detection,

wherein the content analysis means (56) improves the quality of the audio or audio/visual stream stored in the recording collection by comparing a title in the audio or audio/visual recording collection (48, 50) to a title stored in a real time file system or a common memory and either:

 - (i) replacing a title in the audio or audio/visual recording collection (48, 50) with a title stored in the real time file system or the common memory or

- (ii) replacing portions of the title in the audio or audio/visual recording collection in order to remove voice over portions or defects of any kind or commercials.
- 2. (Original) The system as set forth in claim 1, further including:
 - virtual channels (42) stored on the storage system (36), each virtual channel configured with a virtual channel profile defining the types of audio or audio/visual streams to be included in the virtual channel and, wherein the recording means further:
 - updates the virtual channels by selectively including received audio or audio/visual streams in each virtual channel which matches the virtual channel profile.
- 3. (Original) The system as set forth in claim 1, further including:
 - a most-popular list means (38) for storing the most often broadcasted audio/visual streams, and, the recording means further:
 - updates the most-popular list with the most often broadcasted audio or audio/visual streams.
- 4. (Original) The system as set forth in claim 1, further including:
 - a selection means (16) for playing audio or audio/visual streams selected by the user via the input device (12) on the user output device (14) from one of:
 - the receiving means (19,21) ; and,
 - the audio/visual collection (48,50).
- 5. (Original) The system as set forth in claim 4, further including:
 - a fingerprint analysis means (58) for identifying audio or audio/visual streams by matching a portion or portions of the stream to fingerprints stored in one of a local fingerprint database (60) and a remote fingerprint database (62).
- 6. (Canceled).
- 7. (Original) The system as set forth in claim 4, further including a video removal means (68) for removing a video portion from an audio/visual stream, leaving an audio portion.

8. (Original) The system as set forth in claim 4, further including:
a format-check means (30) for determining and decoding a format of an audio or audio/visual stream, the formats including:

MPEG2;
MPEG4;
MP3;
Ogg Vorbis;
DIVX;
Realplayer Real-Video;
Realplayer Real-Audio;
Microsoft Windows Media;
Microsoft Netshow;
Apple Quicktime;
Xing StreamWorks; and
analog.

9. (Original) The system as set forth in claim 8, further including:
a plug-in database means (64) for storing and retrieving plug-ins to enable the format check means (30) to determine and decode additional audio or audio/visual stream formats.

10. (Previously Presented) A personal recording and playback system (10) according to claim 1 wherein:

the system includes a processor (32) programmed to:
track audio or audio/visual preferences of a user of the system (10);
maintain a user profile database (34);
receive multiple audio or audio/visual streams in the background via the receiver (19,21)
and store the received multiple audio or audio/visual streams in the memory (36); and,
maintain an audio or audio/visual recording collection (48,50) in the memory according to the user preferences by analyzing the received audio/visual streams.

11. (Original) The system as set forth in claim 10, further including:

a selection processor (16) configured to select audio or audio/visual streams selected by the user to be played by the input/output (12,14), the audio or audio/visual streams being selected from one of:

the receiver (19,21); and,

the audio/visual collection (48,50).

12-16. (Canceled).

17. (Previously Presented) A method for maintaining an audio/visual collection in a device having a memory for storing audio/visual content and a processor that executes the method comprising:

receiving one or more audio or audio/visual streams in a background process transparent to a user;

storing the received audio or audio/visual streams in a memory of the device for subsequent analysis;

monitoring playback preferences of the user;

maintaining in a memory of the device a user preference profile including the user playback preferences;

storing and maintaining the audio or audio/visual streams in a audio/visual collection (48,50) in a memory of the device;

analyzing and matching the recorded audio or audio/visual streams to the user preference profile; and

examining and improving a quality of an audio or audio/visual stream stored in the audio/visual collection and identifying at least one of: a profile of the stream, voice over sections of the stream, degraded sections of the stream, and commercial detection,

wherein improving the quality of the audio or audio/visual stream stored in the audio/visual collection comprises comparing a title in the audio or audio/visual recording collection (48, 50) to a title stored in a real time file system or a common memory and either:

(i) replacing a title in the audio or audio/visual recording collection with a title stored in the real time file system or the common memory or

- (ii) replacing portions of the title in the audio or audio/visual recording collection (48, 50) in order to remove voice over portions or defects of any kind or commercials.

18. (Original) The method as set forth in claim 17, wherein the step of maintaining a user profile further includes:

maintaining one or more virtual channels, each virtual channel configured according to specific user preferences and including stored audio or audio/video collection streams matching the specific user preferences.

19. (Original) The method as set forth in claim 18, wherein the step of storing the queued stream includes:

selectively adding the stored stream to the virtual channels.

20. (Original) The method as set forth in claim 17, wherein the step of maintaining a user profile further includes:

maintaining a most-popular list including a configured number of stored audio or audio/video collection streams most often received.

21. (Original) The method as set forth in claim 17, further including at least one of:

identifying each of the audio or audio/visual streams by matching its fingerprint to a local fingerprint database entry;

identifying each of the audio or audio/visual streams by matching its fingerprint to a remote fingerprint database entry; and,

subtracting the video portion from an audio or audio/visual stream to produce an audio stream.

22. (Previously Presented) A personal recording and playback system (10) comprising:

a receiving means (19, 21) for receiving streaming audio/visual input from at least one of broadcast radio, broadcast TV stations, cable TV systems, satellite TV systems, the Internet, and other wide-area networks:

a means (21) for connecting to wide area networks including the Internet and receiving streaming audio or audio/visual input;

a storage means (36) for storing the received streaming audio or audio/visual input;

a user input means (12) for inputting user commands to the recording/playback system (10);

a user output means (14) for outputting the audio or audio/visual input;

a recording means (32) for transparently:

tracking audio or audio/visual preferences of a user of the system (10);

maintaining a user profile database (34) for storing and maintaining user preferences;

receiving multiple audio or audio/visual streams via the receiving means (19, 21) and storing the received multiple audio or audio/visual streams on the storage means (36) in the background; and,

maintaining an audio or audio/visual recording collection (48, 50)

according to the user preferences by analyzing the received audio/visual streams; and

a content analysis means (56) for examining and improving a quality of an audio or audio/visual stream stored in the recording collection and identifying at least one of: a profile of the stream, and voice over sections of the stream, degraded sections of the stream, and commercial detection,

wherein the content analysis means (56) improves the quality of the audio or audio/visual stream stored in the recording collection by comparing a title in the audio or audio/visual recording collection (48, 50) to a title stored in a real time file system or a common memory and replacing portions of the title in the audio or audio/visual recording collection in order to remove voice over portions or defects of any kind or commercials.